

Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

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Denominator used for **children** aged 1 – 16 years.

Data on the Swedish child population were retrieved from the web site of the Government Agency Statistics Sweden:

http://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START_BE_BE0101_BE0101A/BefolkningNy/

School attendance has been compulsory in Sweden throughout spring 2020.

Denominator used for **schoolteachers (and pre-school teachers)**.

The denominator included preschool teachers and schoolteachers who were registered as being teachers by occupation according to the Swedish government agency *Statistics Sweden*. These individuals were then compared with individuals who had other occupations. There are however no data on whether teachers have worked as teachers (or whether policemen have worked as policemen and taxi drivers as taxi drivers etc.)(*Personal communication, the Swedish Public Health Agency Aug 26, 2020*).

Due to the small number of pre-school teachers (<10) with COVID-19-related intensive care, the Swedish Public Health Agency requested that we not present the exact number of cases or the denominator for pre-school teachers.

Exposure time.

Between March 1 and June 30, Swedish school children had about 66 days in class.

Duration of follow-up of children in the intensive care units.

Children (aged 1-16 years) were followed up until August 25, 2020 (*Personal communication, the Swedish Public Health Agency*). The last child included in our Table 1 was discharged on June 27. This means that we had a follow-up of more than 8 weeks of all included children to rule out that anyone of them had died after discharge (none had).

Total number of deaths for children 1-16 years in Sweden, regardless of whether admitted to ICU or not.

Below are data from the National Board of Health and Welfare on any deaths (including death from non-medical reasons) during four month before the pandemic and the first four months during the pandemic. The numbers are small which means that variation can occur over time, and over the year. For instance drowning occurs in summer months, and traffic accidents throughout the year.

	Month,	1-6 years	Sum	7-16 years	Sum
2019	Nov	5		8	
	Dec	6		8	
2020	Jan	10		17	
	Feb	8	29	3	36
	March	6		14	
	April	5		8	
	May	2		15	
	June	5	18	14	51

Overall the number of deaths in our study population 1-16 years was 65 (29+36) in the four preceding months and 69 (18+51) in the four months exposed to COVID-19. The highest death rates for any of the age groups was seen in January 2020.

Study population for the teacher morbidity analysis:

Data were based on individuals aged 25-65 years in Sweden, between March 13 until June 30, 2020. Healthcare personnel were not included in this analysis, since their inclusion would have driven down the risk estimates for any other occupational group

Data on covid-19 for the teacher analysis were obtained from the SmiNet system administered by the Swedish Public Health Agency. More information can be found here:

<https://en.wikipedia.org/wiki/SmiNet>

Additional information

The Swedish intensive care register has not been validated for children with COVID-19. Webpage:

<https://www.icuregswe.org>

The Swedish pediatric rheumatology quality register has not been validated for children with

Multisystem inflammatory Syndrome in children. Webpage: <http://barnreumaregistret.se>

Definition of Multisystem inflammatory Syndrome in children (MIS-C)

World Health Organization. Multisystem inflammatory syndrome in children and adolescents with COVID-19: Scientific Brief. 2020. Available at: <https://www.who.int/news-room/commentaries/detail/multisystem-inflammatory-syndrome-in-children-and-adolescents-with-covid-19> (Accessed on Nov 26, 2020).

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